

cells within said sample and assessing a diagnosis of the cervical lesion and/or the progression potential of said lesion.

Claim 23: A method according to claim 22, wherein the sample is selected from one of the following a) cervical smear b) a sample containing cells of cervical origin c) a biopsy or microbiopsy comprising cervical cells or tissues.

Claim 24: The method according to claim 22, wherein the cervical lesions comprise precancerous stages, mild to severe dysplasias and/or microinvasive or invasive carcinomas.

Claim 25: The method of claim 22, wherein the assessment of the progression potential of the lesion allows for the early diagnosis of cervical carcinomas and their precursory stages.

Claim 26: The method of claim 22, wherein the assessment of the progression potential of the lesion allows for prognosticating the disease course.

Claim 27: The method of claim 22, wherein the polypeptides characteristic for the early or late passages of HPV immortalized cells are obtainable by a method comprising isolating RNA from early and late passages of HPV immortalized cells, comparing the mRNA present in the samples of early and late passages to each other, determining characteristic differences in the levels of distinct mRNA molecules between the compared samples, isolating the mRNA, which exhibit characteristic differences between early and late stages of HPV immortalized cells and obtaining the encoded polypeptide from the mRNA molecules detected.

Claim 28: The method of claim 22, wherein the polypeptide characteristic for the early or late passages of HPV immortalized cells comprises the amino acid sequence given in SEQ ID NO: 1.

Claim 29: The method of claim 22, wherein the polypeptide characteristic for the early or late passages of HPV immortalized cells is encoded by the nucleic acid sequence given in SEQ ID NO: 1, or by a sequence that hybridizes to said sequence under stringent conditions.

Claim 30: The method of claim 22, wherein the polypeptide characteristic for the early or late passages of HPV immortalized cells exhibits the biological properties of the protein characterized by the amino acid sequence given in SEQ ID NO: 1.

Claim 31: The method of claim 22, wherein the polypeptides characteristic for the early or late passages of HPV immortalized cells comprise fragments of the amino acid sequence depicted in SEQ ID NO: 1 of at least five consecutive amino acids.

Claim 32: The method according to claim 22, wherein the detection is carried out using an agent specifically binding to said polypeptides.

Claim 33: The method of claim 22, wherein said agent is an antibody directed against said polypeptides.

Claim 34: The method of claim 33, wherein the antibody is a monoclonal antibody.

Claim 35: The method of claim 33, wherein the antibody is a polyclonal antibody.

Claim 36: The method according to claim 22, wherein the detection is carried out by a method comprising at least one of the following:

- western blot
- ELISA
- Immunoprecipitation
- Immunofluorescence
- Immunocyto-chemistry

Claim 37: A method for diagnosis of cervical lesions and evaluation of the progression potential of cervical lesions comprising obtaining a sample of a cervical lesion from a patient, determining the presence or absence of autoantibodies directed against polypeptides characteristic for the early or late passages of HPV immortalized cells according to claim 22 within said sample and assessing a diagnosis of the cervical lesion and/or the progression potential of said lesion.

Claim 38: A kit for performing a method according to claim 22.

Claim 39: An isolated polypeptide characteristic for the early or late passages of HPV immortalized cells obtainable by a method comprising isolating RNA from early and late passages of HPV immortalized cells, comparing the mRNA present in the samples of early and late passages to each other, determining characteristic differences in the levels of distinct mRNA molecules between the compared samples, isolating the mRNA molecules, which exhibit characteristic differences between early and late stages of HPV immortalized cells and obtaining the encoded polypeptide from the mRNA molecules detected.

- Claim 40: The isolated polypeptide according to claim 39, wherein the polypeptide comprises the amino acid sequence given in SEQ ID NO: 1.
- Claim 41: The isolated polypeptide, which is encoded by the nucleic acid sequence given in SEQ ID NO: 1 or a nucleic acid sequence, that hybridizes to the given nucleic acid sequence under stringent conditions.
- Claim 42: The isolated polypeptide according to claim 39, wherein the polypeptide exhibits the biological properties of a polypeptide characterized by the amino acid sequence given in SEQ ID NO: 1.
- Claim 43: The isolated polypeptide according to claim 39, wherein the polypeptide is characterized by a sequence as given in SEQ ID NO: 1, or a sequence that differs from that sequence by one or several mutations, that do not alter the biological functionality of the polypeptide.
- Claim 44: The isolated polypeptide according to claim 39, wherein the polypeptide comprises a fragment of at least 5 consecutive amino acids of the sequence given in SEQ ID NO: 1.
- Claim 45: The isolated polypeptide, that is recognized by an antibody raised against a polypeptide according to claim 39.
- Claim 46: An antibody directed against the isolated polypeptide of claim 39.
- Claim 47: The antibody according to claim 46 that is a polyclonal antibody.
- Claim 48: The antibody according to claim 47 that is a monoclonal antibody.
- Claim 49: A fragment of an antibody according to claim 46.
- Claim 50: The fragment of an antibody according to claim 49 which is a Fab fragment.